WHAT IS CLAIMED IS:

1. A method wherein a glass sheet, which has been heated to have a viscosity of not lower than 10^5 Pa·s and not higher than 10^8 Pa·s, is pressed against a mold having a certain bending surface to be bent in a shape along the bending surface;

comprising controlling a bending temperature T and a bending time period t for the glass sheet so as to satisfy the following formulas 1 and 2, and

bending the glass sheet:

$$0.05 < \phi < 2.00 \qquad \text{Formula 1}$$

$$\phi = \int_0^t \frac{P(\tau)}{\eta(T)} d\tau \qquad \text{Formula 2}$$

where $P(\tau)$ is a surface pressure difference (unit: Pa) between a pressure applied on a primary surface of the glass sheet and a pressure applied on a rear surface of the glass sheet at a time τ, t is a bending time period (unit: s), $\eta(T)$ is the viscosity (unit: Pa·s) of the glass sheet at a temperature T, and T is a bending temperature (unit: °C) at the time τ.

2. The method according to Claim 1, wherein the bent glass sheet includes a portion having a radius of curvature of not larger than 100 mm.

3. The method according to Claim 2, wherein the bent glass sheet includes a corner where three surfaces connect together, and each of the surfaces is a flat surface or a curved surface having a radius of curvature

of not smaller than 500 mm.

4.   The method according to Claim 1, further comprising sandwiching a peripheral portion of the glass sheet between the mold and a ring substantially conforming to a peripheral edge of the glass sheet, the bending surface of the mold being formed in a concave shape; and sucking air between the glass sheet and the bending surface during bending the glass sheet.

5.   The method according to Claim 4, further comprising trimming a portion of the glass sheet sandwiched between the ring and the mold after bending the glass sheet.

6.   The method according to Claim 1, further comprising putting the glass sheet on a ring, and pressing the glass sheet against the mold to press the glass sheet during bending the glass sheet, the mold being provided above the glass sheet.

7.   The method according to Claim 1, wherein the glass sheet is bent primarily only by gravity.

8.   The method according to Claim 1, further comprising applying a mold-releasing agent to the mold before bending the glass sheet.

9.   The method according to Claim 1, further comprising preparing the glass sheet by a float method.

10. The method according to Claim 1, wherein the glass sheet is for production of an automobile window.

11. The method according to Claim 1, further comprising blowing air to swell the glass sheet in a first direction,

followed by sucking air to bend the glass sheet in a second direction.

12. An apparatus where a glass sheet, which has been heated to have a viscosity of not lower than 10^5 Pa·s and not higher than 10^8 Pa·s, is pressed against a mold having a certain bending surface to be bent in a shape along the bending surface;

comprising a controller for performing operational monitoring of respective members in the apparatus and operational controlling of the respective members, the controller having a program code stored therein, the program code performing a step recited in Claim 1 in a computer.